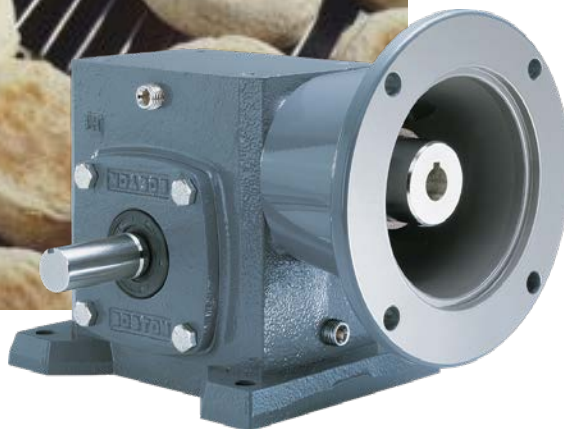
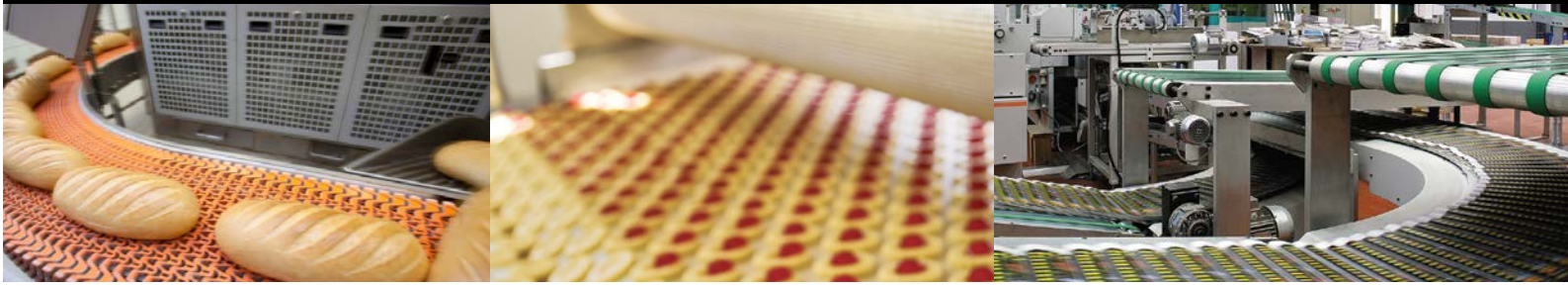




**Boston Gear
QC 700 Series
NEMA
Flanged
Reducer
Coupling Style**

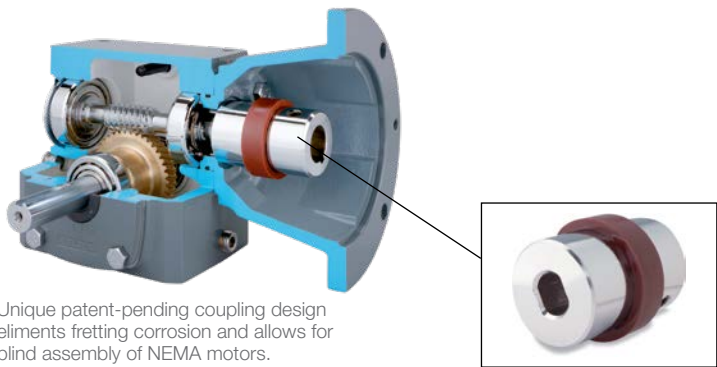
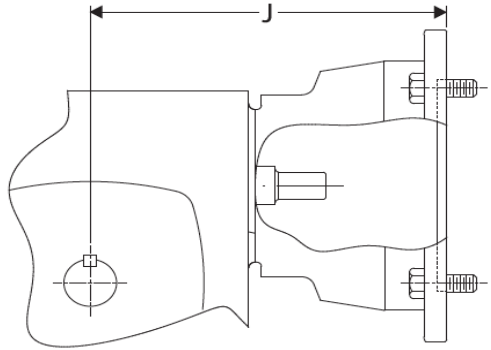




THE FASTEST MOTOR-REDUCER ASSEMBLY IN THE WEST (AND THE EAST)

Many maintenance engineers and industrial OEM's choose couplings to connect their motors and gearboxes together. The advantages can be many, but the disadvantages can quickly add up. That's because a slot must be cut in the gearbox flange to allow an Allen wrench to align the coupling... the same slot that lets in caustic washdown solution, water, and other particles, also makes it challenging to see what you need when connecting the motor.

That's why Boston Gear developed the QC 700 Series, featuring a completely self-aligning coupling that eliminates the need for a slot in the flange and allows for quick motor and reducer assembly. Fretting corrosion is eliminated, which means your motor comes off when you want it to – with hand tools, not a jackhammer. The QC 700 Series is truly the first quick connecting NEMA coupling-mount speed reducer in its class.



Unique patent-pending coupling design eliminates fretting corrosion and allows for blind assembly of NEMA motors.

Reducer Express

We guarantee same day shipment by air if we receive your order by 2pm EST or we guarantee next business day shipment by air if your order is received after 2pm EST... or the air freight is free!



QC Compared To RF					Design Space Savings
CD/Reduction		J-NEMA Mounting			
Single	Double	NEMA	QC	RF	
710	W713	42CZ	4.15	4.76	0.61
	W718	56C	5.01	5.72	0.71
713	W721	56C	5.46	6.59	1.13
	W726				
715		56C	6.11	7.34	1.23
		140TC			
718	W730	56C	6.29	7.53	1.24
	W732	140TC			
721	W738	56C	6.76	8.31	1.55
		140TC			
724		56TC	6.95	8.50	1.55
		140TC			
		180TC			
726	W752	56TC	7.39	9.47	2.08
		140TC			
		180TC			
730		56TC	7.84	9.92	2.08
		140TC			
		180TC			
732	W760	56TC	8.20	10.28	2.08
		140TC			
		180TC			
738		140TC	8.70	11.81	3.11
		180TC			
		210TC			

Dimensions in inches



Super-finished oil seal diameters on both input and output shafts provide extended seal life.

Integral input worm and shaft design made from high-strength case-hardened alloy steel. Reducer sizes 710 through 730 have pre-lubricant ball bearings; 732 through 760 have tapered roller bearings. Double lip oil seals are standard.

The elimination of the coupling alignment hole ensures that debris and bacteria will not collect on this reducer.

High pressure angle on worm provides greater operating efficiency.

Double bearing input design on all QC 700 sizes along with optional double seals.

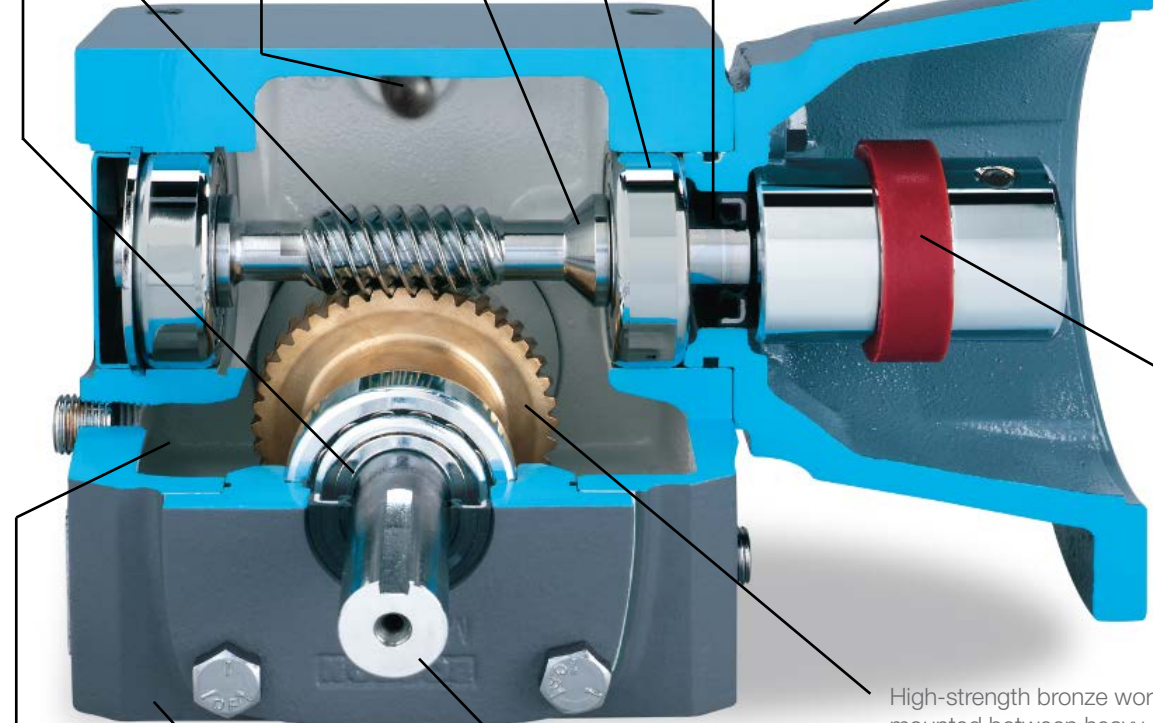
PosiVent® option provides a completely sealed gearbox ready for installation in any mounting position.

The small seal diameter reduces seal wear and extends seal life.

This smooth, BISSC® approved clean motor flange dramatically improves any washdown application.

The enclosed flange keeps the input seal cleaner and extends life.

Unique patent pending coupling design eliminates fretting corrosion and allows for blind assembly of NEMA motors.



Large oil reservoir provides highly efficient heat dissipation and lubrication for longer operating life.

High strength steel output shaft assures capacity for high torque and overhung loads.

High-strength bronze worm gear is straddle mounted between heavy-duty tapered roller bearings to increase thrust and overhung load capacities, sizes 713-760.

Rugged housing of fine-grained, gear-quality cast iron provides maximum strength and durability. Greater rigidity and one-piece construction ensure precise alignment of the worm and gear. This housing construction also provides superior resistance to caustic washdown solutions, plus high heat dissipation and reduced noise level. Pipe plugs allow easy fill, level and drain in any mounting position.

Boston Gear | QC 700 Series NEMA Flanged Reducer Coupling Style



700 Series Right Angle Worm Gearbox - Single Reduction

SBKC H QC 7 38 B - 40 K E Z T - B7 -

Input Shaft Style
Blank – Solid Projecting Input Shaft
F – Quill Style Motor Flange
RF – Coupling Style Motor Flange
QC – *Quick Connect* Motor Flange (close coupled)

7 – 700 Series

Center Distance (inches)
10 – 1.00
13 – 1.33
15 – 1.54
18 – 1.75
21 – 2.06
24 – 2.38
26 – 2.62
30 – 3.00
32 – 3.25
38 – 3.75
52 – 5.13
60 – 6.00

Exact Gear Ratio
 Ratio to 1
5 | **25**
7 | **30**
7.5 | **40**
10 | **50**
12 | **60**
15 | **80**
20 | **100**
 Or Consult Factory for Availability

Vent
Blank – Standard Vent
P – Pressure Vent (5 psi)
Z – Posivent (sealed)

Output Shaft Style
Blank – Solid Output Shaft
H – *BostMount* Hollow Output (setscrews both sides, bore size selectable)
S – Hollow Output (setscrews one side, bore size fixed)

Endcap or Fan (732-760 only)
E – Endcap (standard)
F – Fan

Reducer Material/Paint
Blank – Cast Iron, Std. Gray paint
BKC – Cast Iron, White *BostKleen* paint
SBKC – Cast Iron, Stainless *BostKleen* paint
SS – Stainless Steel material – no paint

Lubrication
Blank – No lubrication
K – Klubersynth UH1 6-460
S – Mobil SHC 634
X – Mobil 600W

Oil Seal
Blank – Standard Seal
T – Two Standard Input Seals
C – High pressure washdown output seals and double input seals (stainless products only) **IP69K**

Base/Mounting Attachment*
Blank – No Base
A – Horizontal base – Top Mount
B – Horizontal base – Bottom Mount
BRB – Riser Block – Top Mount
C – Vertical High base – Right Mount
D – Vertical Low base – Right Mount
E – Vertical High base – Left Mount
F – Vertical Low base – Left Mount
R – *BostMount* Bracket – Right Mount
L – *BostMount* Bracket – Left Mount
M – Conveyor Flange Adptr – Right Mount
N – Conveyor Flange Adptr – Left Mount
V – Hollow Output Flange – Right Mount
W – Hollow Output Flange – Left Mount
X – Vertical Base – Rear Mount
Y – Vertical Base – Front Mount

*Projection of Base/Flange/Bracket assumes one is always looking into the input shaft in the #1 mounting position

NEMA Motor Mounting

BORE CODE	NEMA MOUNTING	INPUT BORE	KEYWAY
B4	42CZ	.500"	1/8 x 1/16
B5	56C	.625	3/16 x 3/32
B7	140TC/180C	.875	3/16 x 3/32
B9	180TC/210C	1.125	1/4 x 1/8
B11	210TC/250UC	1.375	5/16 x 5/32
B13	250TC	1.625	3/8 x 3/16

Blank Solid Input Shaft (No Flange)



Clutch/Brake

Motor

HS 1 - P24 -

CMBA140TR-6 -

HUTF-IDB - 3

BostMount Output Bore Code
 For H Series Only Specified in 1/16" increments.
 Example: 1 1/4" = P20

5/8 - P10	1-1/2 - P24
3/4 - P12	1-5/8 - P26
7/8 - P14	1-11/16 - P27
15/16 - P15	1-3/4 - P28
1 - P16	1-7/8 - P30
1-1/16 - P17	1-15/16 - P31
1-1/8 - P18	2 - P32
1-3/16 - P19	2-1/8 - P34
1-1/4 - P20	2-3/16 - P35
1-5/16 - P21	2-1/4 - P36
1-3/8 - P22	2-7/16 - P39
1-7/16 - P23	3-7/16 - P55

See catalog P-1485-BG for availability by center distance.
 Consult Factory for Metric Bores

Common C-Face Brakes Installed

115/230 VAC 60hz	Ft-Lb	Bore Code
CMBA56R-3	3	B5
CMBA56R-6	6	B5
CMBA140TR-6	6	B7

208-230/460 VAC 60hz	Ft-Lb	Bore Code
CMBA56U-3	3	B5
CMBA56U-6	6	B5
CMBA140TU-6	6	B7

Other sizes available. See catalog P-1485-BG for more information.

Motor Conduit box Orientation
 (When looking at fan end of motor and gearbox is in mounting position #1)

- 0 - 12 O'clock
- 3 - 3 O'clock (standard for G & H shaft assemblies)
- 6 - 6 O'clock
- 9 - 9 O'clock (standard for J shaft assemblies)

Mounting Positions

Blank - No Lubrication Supplied

For Factory Prelubrication Indicate Mounting Position

- 1 - Standard Mounting (Worm over)
- 2-6 - Refer to Mounting Positions in Catalog

Output Shaft
 (When facing Input and worm on top)

- G - Carbon Steel Output Projection - Left
- H - Carbon Steel Double Output Projection
- J - Carbon Steel Output Projection - Right
- GS - Stainless Output Projection - Left
- HS - Stainless Double Output Projection
- JS - Stainless Output Projection - Right

Common C-Face Motors Installed

HP Rating	Bore Code	AC Voltage	
		115/208-230-1-60	208-230/460-3-60
1/4 HP	B5	DRTFB	DUTFB
1/3 HP	B5	ERTFB	EUTFB
1/2 HP	B5	FRTFB	FUTFB
	B5		FUT-SS
	B5		FUTF-IDB
3/4 HP	B5	GRTFB	GUTFB
	B5		GUT-SS
	B5		GUTF-IDB
1 HP	B5	HRTF-5/8B	HUTF5/8B
	B5		HUT5/8-SS
	B5		HUTF5/8-IDB
	B7	HUTFB	
	B7	HUT-SS	
1.5 HP	B7		HUTF-IDB
	B7		JUTFB
	B7		JUTF-SS
2 HP	B7		JUTF-IDB
	B5		KUTF5/8B
	B7		KUTFB
	B7		KUTF-SS
3 HP	B7		KUTF-IDB
	B9		LUTFB
	B9		LUTF-SS
5 HP	B9		LUTF-IDB
	B9		MUTFB

Other motors available, please see catalog P-1485-BG

- T - Totally enclosed non-ventilated
- TF - Totally enclosed fan cooled
- SS - Stainless
- IDB - Inverter Duty (10:1 turn down constant torque)
- B5 - 56C
- B7 - 140TC
- B9 - 180TC

Boston Gear | QC 700 Series NEMA Flanged Reducer Coupling Style



700 Series Right Angle Worm Gearbox - Double Reduction

SBKC H QC HMA 7 38 B - 300 K E Z T - B5 -

Input Shaft Style

Blank—Solid Projecting Input Shaft
F— Quill Style Motor Flange
RF— Coupling Style Motor Flange
QC— *Quick Connect* Motor Flange (close coupled)

Output Shaft Style

Blank—Solid Output Shaft
H— *BostMount* Hollow Output (setscrews both sides, bore size selectable)
S— Hollow Output (setscrews one side, bore size fixed)

Reducer Material/Paint

Blank—Cast Iron, Std. Gray paint
BKC— Cast Iron, White *BostKleen* paint
SBKC—Cast Iron, Stainless *BostKleen* paint
SS— Stainless Steel material — no paint

Reduction Type

WA — Double Reduction Parallel Shafts
WB — Double Reduction Parallel Shafts
WC — Double Reduction Right Angle Shafts
WD — Double Reduction Right Angle Shafts
HMA — Helical Multiplier 12 O'clock
HMB — Helical Multiplier 6 O'clock
HMC — Helical Multiplier 3 O'clock
HMD — Helical Multiplier 9 O'clock
WP — Planetary Torque Multiplier

7 - 700 Series

Center Distance (inches)

13 — 1.33
 18 — 1.75
 21 — 2.06
 26 — 2.62
 30 — 3.00
 32 — 3.25
 38 — 3.75
 52 — 5.13
 60 — 6.00

Exact Gear Ratio
Ratio to 1

100	1200
150	1800
200	2000
300	2400
400	3000
600	3600
900	

Check Catalog — Or consult factory for availability

Lubrication

Blank—No lubrication
K— Klubersynth UH1 6-460
S— Mobil SHC 634
X— Mobil 600W

Vent

Blank—Standard Vent
P— Pressure Vent (5 psi)
Z— Posivent (sealed)

Endcap (732-760 only)

E — Endcap (standard)

Oil Seal

Blank— Standard Seal
T— Two Standard Input Seals
C— High pressure washdown output seals and double input seals (stainless products only) **IP69K**

Base/Mounting Attachment*

Blank — No base kit required
A & B — Horizontal bases
C & E — Vertical High bases
D & F — Vertical Low bases
R/L — *BostMount* Output Bracket
X — Input Vertical Up
Y — Input Vertical Down
V/W — Hollow O/P with base
M/N — Hollow O/P with CFA

*See catalog P-1485-BG for mounting configurations

NEMA Motor Mounting

BORE CODE	NEMA MOUNTING	INPUT BORE	KEYWAY
B4	42CZ	.500"	1/8 x 1/16
B5	56C	.625	3/16 x 3/32
B7	140TC/180C	.875	3/16 x 3/32
B9	180TC/210C	1.125	1/4 x 1/8
B11	210TC/250UC	1.375	5/16 x 5/32
B13	250TC	1.625	3/8 x 3/16

Blank Solid Input Shaft (No Flange)



HS

1

P24

CMBA56U-6

HUTF5/8-IDB - 3

Mounting Positions
Blank - No Lubrication Supplied
For Factory Prelubrication
Indicate Mounting Position
 1 - Standard Mounting (Worm over)
 2-6 - Refer to Mounting Positions in Catalog P-1485-BG

BostMount Output Bore Code
 For H Series Only Specified in 1/16" increments.
 Example: 1 1/4" = P20
 5/8 - P10 1-1/2 - P24
 3/4 - P12 1-5/8 - P26
 7/8 - P14 1-11/16 - P27
 15/16 - P15 1-3/4 - P28
 1 - P16 1-7/8 - P30
 1-1/16 - P17 1-15/16 - P31
 1-1/8 - P18 2 - P32
 1-3/16 - P19 2-1/8 - P34
 1-1/4 - P20 2-3/16 - P35
 1-5/16 - P21 2-1/4 - P36
 1-3/8 - P22 2-7/16 - P39
 1-7/16 - P23 3-7/16 - P55
 See catalog P-1485-BG for availability by center distance..

Clutch/Brake

Common C-Face Brakes Installed		
115/230 VAC 60hz	Ft-Lb	Bore Code
CMBA56R-3	3	B5
CMBA56R-6	6	B5
CMBA140TR-6	6	B7
208-230/460 VAC 60hz		
208-230/460 VAC 60hz	Ft-Lb	Bore Code
CMBA56U-3	3	B5
CMBA56U-6	6	B5
CMBA140TU-6	6	B7

Other sizes available. See catalog P-1485-BG

Motor

Motor Conduit box Orientation
 (When looking at fan end of motor and gearbox is in mounting position #1)
 0 - 12 O'clock
 3 - 3 O'clock (standard for G & H shaft assemblies)
 6 - 6 O'clock
 9 - 9 O'clock (standard for J shaft assemblies)

Common C-Face Motors Installed

HP Rating	Bore Code	AC Voltage	
		115/208-230-1-60	208-230/460-3-60
1/4 HP	B5	DRTFB	DUTFB
1/3 HP	B5	ERTFB	EUTFB
1/2 HP	B5	FRTFB	FUTFB
	B5		FUT-SS
	B5		FUTF-IDB
3/4 HP	B5	GRTFB	GUTFB
	B5		GUT-SS
	B5		GUTF-IDB
1 HP	B5	HRTF-5/8B	HUTF5/8B
	B5		HUT5/8-SS
	B5		HUTF5/8-IDB
	B7		HUTFB
	B7		HUT-SS
	B7		HUTF-IDB
1.5 HP	B7		JUTFB
	B7		JUTF-SS
	B7		JUTF-IDB
2 HP	B5		KUTF5/8B
	B7		KUTFB
	B7		KUTF-SS
	B7		KUTF-IDB
3 HP	B9		LUTFB
	B9		LUTF-SS
	B9		LUTF-IDB
5 HP	B9		MUTFB

Other motors available, please see catalog P-1485-BG.
 T - Totally enclosed non-ventilated
 TF - Totally enclosed fan cooled
 SS - Stainless
 IDB - Inverter Duty (10:1 turn down constant torque)
 B5 - 56C
 B7 - 140TC
 B9 - 180TC

Output Shaft Assembly	
Double Reduction WA and WB	
G	Output Projection Opposite Input
H	Double Output Projection
J	Output Projection Same Side as Input
GS	Stainless Output Projection Opposite Input
HS	Stainless Double Output Projection
JS	Stainless Output Projection Same Side as Input
Double Reduction WA and WB Mirrored Design	
K	Output Projection Opposite Input
L	Double Output Projection
M	Output Projection Same Side as Input
KS	Stainless Output Projection Opposite Input
LS	Stainless Double Output Projection
MS	Stainless Output Projection Same Side as Input
Double Reduction WC and WD (When facing Input)	
G	Output Projection Down
H	Double Output Projection
J	Output Projection Upward
GS	Stainless Output Projection Down
HS	Stainless Double Output Projection
JS	Stainless Output Projection Upward
Double Reduction WC and WD (When facing Input) Mirrored Design	
K	Output Projection Down
L	Double Output Projection
M	Output Projection Upward
KS	Stainless Output Projection Down
LS	Stainless Double Output Projection
MS	Stainless Output Projection Upward

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